BAISHIDENG PUBLISHING GROUP INC
8226 Regency Drive, Pleasanton, CA 94588, USA
Telephone: +1-925-223-8242 Fax: +1-925-223-8243
E-mail: bpgoffice@wjgnet.com http://www.wjgnet.com

# ESPS PEER-REVIEW REPORT

**Name of journal:** World Journal of Gastroenterology
**ESPS manuscript NO:** 28458
**Title:** Sex Differences and Effects of Oestrogen in Rat Gastric Mucosal Defence
**Reviewer's code:** 00003557
**Reviewer's country:** United States
**Science editor:** Yuan Qi
**Date sent for review:** 2016-07-01 15:49
**Date reviewed:** 2016-08-01 03:16

| CLASSIFICATION | LANGUAGE EVALUATION | SCIENTIFIC MISCONDUCT | CONCLUSION |
|---|---|---|---|
| [ ] Grade A: Excellent | [ ] Grade A: Priority publishing | Google Search: | [ ] Accept |
| [ ] Grade B: Very good | [Y] Grade B: Minor language polishing | [ ] The same title | [ ] High priority for publication |
| [Y] Grade C: Good | [ ] Grade C: A great deal of language polishing | [ ] Duplicate publication | [ ] Rejection |
| [ ] Grade D: Fair | [ ] Grade D: Rejected | [ ] Plagiarism | [ ] Minor revision |
| [ ] Grade E: Poor | | [Y] No | [Y] Major revision |
| | | BPG Search: | |
| | | [ ] The same title | |
| | | [ ] Duplicate publication | |
| | | [ ] Plagiarism | |
| | | [Y] No | |

## COMMENTS TO AUTHORS

The authors examined difference in gastric mucosal blood flow between males and females using an in vivo rat experimental model. They found that male rats had approx. 2-fold higher blood flow in the gastric corpus mucosa compared to females and that relative gastric mucosal blood flow decreased during estrogen administration in males but not in females . Also the permeability of the gastric mucosa increased to a higher level in females than in males after taurocholate administration. Importantly the mean clearance increase, mucus thickness and accumulation rate and the expression of endothelial ERα, ERβ or CGRP in the gastric mucosa did not differ significantly between the sexes. Comments 1) In the introduction and conclusions the authors made extensive references to gastric cancer and hypothesized that a potentially protective effect of estrogen could be exerted by influencing the mechanisms of gastric mucosal defense including blood flow. Since they did not study gastric cancer model in rat (e.g. nitrosoguanidine-induced gastric cancer in rats) nor the effect of estrogens in this model they could not test their hypothesis. Cancer involves/requires epithelial metaplasia, dysplasia, reduced tumor suppressor genes, immune system involvement, stem cells etc. Therefore, in this paper the authors should stick to their findings, which

are interesting. 2) While blood flow is one of the important mechanisms of mucosal defense, as is mucus there are other factors that are important and should be at least mentioned and possibly studied. References on gastric mucosal defense should be updated, e.g. they should cite - Laine L, Takeuchi K, Tarnawski A. Gastric mucosal defense and cytoprotection: bench to bedside. Gastroenterology 135:41-60, 2008 and newer papers published in the WJG. 3)In the manuscript the authors stated that "CGRP staining was present in the cytosol of gastric glands, infiltrating cells, myenteric neurons of the muscularis and in endothelial cells of blood vessels. CGRP staining was less than for ERα and ERβ and was only observed in the cytosol of endothelial cells." The authors should elaborate on the distribution of above receptors in endothelial cells of mucosal microvessels provide extensive, good quality illustration (pictures) for ERα, ERβ and CGRP staining.